



BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Asphaltting and Improvements
to roads and drains at A Sector, B Sector Judicial
layout, Someshwara nagara in ward no -04 of
yelahanka Satellite town sub division .

ESTIMATE COST: RS. 300.00 Lakhs

JOB NUMBER: 004-19-000045

*Asst. Executive Engineer,
Yelahanka new town sub division,
BBMP, BANGALORE-64*

BRUHAT BENGALURU MAHANAGARA PALIKE
Yelahanka Division

Name of Work: **Asphalting and Improvements to roads and drains at A Sector, B Sector, Judicial layout, Someshwaranaga in ward no:04 of Yelahanka satellite town sub division. Ward No 04.**

Job code:004-19-000045

No	Description of Items	Unit	No	Est .Cost Rs.			300.00 Lakhs		
				L	B	D	Qty	Rate	Amount
	Removing and refixing stone slabs of drains and pointing in CM (1 3)(Pg no 27/5.33)								
	18th B cross road	Sqm							
	17th B cross road		2	130.00	0.90		234.00		
	6th B Main road		2	125.00	0.90		225.00		
	7th B Main road		2	130.00	0.90		234.00		
1	20th cross road		2	135.00	0.90		243.00		
			1	170.00	0.90		153.00		
	Missing Slabs 30%						3096.90		
							929.07		
	Basic Rate	105.00					5114.97	111.30	569296.16
	Area Weightage @ 6%	6.30							
		111.30							
	KSRRB 300-3. Earthwork excavation by manual means in ordinary soil involving in average horizontal throw up to 2m & an average lift upto 1.5m, excavated surface leveled & sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. Page No. 142/ Item No. 19.1/ PWD SR 2018-19								
	Desilt								
	18th B cross road		2	130.00	0.60	0.90	140.40		
	17th B cross road		2	125.00	0.60	0.90	135.00		
	6th B Main road		2	130.00	0.60	0.90	140.40		
	7th B Main road		2	135.00	0.60	0.90	145.80		
	20th cross road		2	170.00	0.60	0.90	183.60		
2	6th A main		2	210.00	1.20	0.90	453.60		
	7th A main		2	218.00	1.20	0.90	470.88		
	main		2	160.00	1.20	0.90	345.60		
	10th B cross		2	250.00	1.20	0.90	540.00		
	Basic Rate	130.00							
	Loading & unLoading	57.00					2555.28	233.20	595891.30
	Add for lead for earth (1.28 Tonne / Cum) 16km	38.40							
	Area Weightage @ 6%	7.80							
		233.20							
	KSRB 4-1.2. Providing and laying in position plain cement concrete of cum mix 1 3 6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. KRS 4.1.4.2 (Page No.13, I No.4.2 of KPWD SR 2018-19)								
	Bed Concrete								
	6th A main		2	210.00	1.20	0.15	75.60		
	7th A main		2	218.00	1.20	0.15	78.48		
	main		2	160.00	1.20	0.15	57.60		
	10th B cross		2	250.00	1.20	0.15	90.00		
	Cross Road		1	300.00	5.00	0.15	225.00		
	Cross Road		1	300.00	6.00	0.15	270.00		
	16th A Cross		1	295.00	7.00	0.15	309.75		
	10th B Main		1	280.00	6.50	0.15	273.00		
	Main		1	240.00	4.00	0.15	144.00		
	11th B Main		1	149.00	3.60	0.15	80.46		
			1	250.00	5.50	0.15	206.25		
	Basic Rate	5194.00					1810.08	5505.64	9965648.85
	Area Weightage @ 6%	311.64							
	Total	5505.64							

KBS 4 2 2 Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm coarse granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, with superplasticiser @ 3lts conforming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or facing courses, parapets, coping, bed blocks, anchor blocks, plain window cill, fillet etc. including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4 1, 4 6 (Page 14/4 11) 2018-19

Walls

6th A Main road								
7th A Main road	4	210 00	0 15	0 75	94 50			
Main road	4	218 00	0 15	0 75	98 10			
10th B cross	4	160 00	0 15	0 75	72 00			
Raft	4	250 00	0 15	0 75	112 50			
6th A Main road								
7th A Main road	2	210 00	0 90	0 15	56 70			
Main road	2	218 00	0 90	0 15	58 86			
10th B cross	2	160 00	0 90	0 15	43 20			
	2	250 00	0 90	0 15	67 50			
					603 36	5998 54	3619279.09	
Basic Rate	5659 00							
Area Weightage @ 6%	339 54							
Total	5998.54							

KSRB 4-6.4 Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4 6 2 (Page 16/4 31) of KPWD S R 2018-19

6th A Main road	8	210 00		0 75	1260 00			
7th A Main road	8	218 00		0 75	1308 00			
Main road	8	160 00		0 75	960 00			
10th B cross	8	250 00		0 75	1500 00			
					5028.00	379 48	1908025.44	
Basic Rate	358 00							
Area Weightage @ 6%	21 48							
Total	379.48							

KSRB 4 9 2 Providing T.M.T Fe 500 steel reinforcement for R C C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured & paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4 6 3 (P-18/4 46 2)

For Drain	Ton							
Total RCC Quantity =	Cum							
For 1 Cum = 60	Kg				603 36			
	Kg				60 00			
					36201 60			
Basic Rate	70966 00				36.20	75223 96	2723227.71	
Area Weightage @ 6%	4,257 96							
Total	75223.96							

Providing & laying precast drain cover slab of 100 mm thickness in CM 1.3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge (1 20 x 0.60 x 0 10) Data rate

	Sqm							
6th A Main road								
7th A Main road	2	210 00	0 90		378 00			
Main road	2	218 00	0 90		392 40			
10th B cross	2	160 00	0 90		288 00			
	2	250 00	0 90		450 00			
					1508.40	2095 00	3160098.00	
DATA Rate	2095 00							
Total	2095.00							

Removing and resetting of kerb stones. Page No. 270/ Item No 37 57/ PWD SR 2018-19

6th A Main road	mtr							
	2	210 00			420 00			

7th A Main road		2	218 00			436 00		
road		2	160 00			320 00		
10th B cross		2	250 00			500 00		
18th B cross road		2	130 00			260 00		
17th B cross road		2	125 00			250 00		
6th B Main road		2	130 00			260 00		
7thh B Main road		2	135 00			270 00		
20th cross road		2	170 00			340 00		
Missing kerb 30%						3056 00		
						916 80		
Basic Rate	99 00					2139.20	104 94	224487.65
Area Weightage @ 6%	5 94							
Total	104.94							

Providing and fixing pre cast solid concrete kerb stones of size 450x150x500 mm made out of CC 1 2 4 and finished with CM 1 3 plastering and finishing cutting etc., complete Page No. 27/ Item No. 5 29 2/ PWD SR 2018-19

	No's							
						916 80		
No Of Kerb Legth/0.45						2037.33	467 46	952371.84
Basic Rate	441 00							
Area Weightage @ 6%	26 46							
Total	467.46							

KSRRB M300-14 Excavation for roadwork in all types of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No 301 (pg no-143, S Lno-19 14) KPWD S R 2018-19

Road Work	Cum							
cc road								
cross road	1	60 00	6 00	0 20	72 00			
					72.00	151 66	10919.52	
Basic Rate	41 00							
Loading & unLoading	57 00							
Add for lead for earth (1.28 Tonne / Cum) for 16km	51 20							
Area Weightage @ 6%	2 46							
	151 66							

KSRRB M600-1. Construction of dry lean cement concrete mix CC15 10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub-base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications MORTH Specification No. 601. (P No. 174, I No. 22 1 of PWD SR 2018-19)

	Cum							
cc road								
cross road	1	60 00	6 00	0 15	54 00			
					54.00	3800 10	205205.40	
Basic Rate	3585 00							
Area Weightage @ 6%	215 10							
Total	3800.10							

KSRRB M600-2 Cement Concrete Pavement - Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 25mm and down size graded granite metal coarse aggregate with superplasticizer at 3lts conforming to IS 9103-1999 reaffirmed 2008, (Coarse and fine aggregate conforming to IS 383) mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. MORTH Specification No. 602. - with M30 @ 360 Kg/cum Cement, C.A. 0.69 cum F.A. 0.46 cum (P No 175, I No 22 2 of PWD SR 2018-19)

cc road	cum							
cross road	1	55 00	6 00	0 15	49 50			

						49.50	5849.08	289529.46
Basic Rate	5518.00							
Area Weightage @ 6%	331.08							
Total	5849.08							

Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc, with all lead and lift. (P No 176, I No. 22 7 of PWD SR 2018-19)

cc road	Sqm							
12 cross road		1	60.00	6.00		360.00		
						360.00	72.08	25948.80
Basic Rate	68.00							
Area Weightage @ 6%	4.08							
Total	72.08							

KSRRB 500-2 Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 158/ Item No. 21 2/ PWD SR 2018-19

	Sqm							
18th B cross road		1	130.00	4.80		624.00		
17th B cross road		1	125.00	3.80		475.00		
6th B Main road		1	130.00	5.00		650.00		
7thh B Main road		1	135.00	4.00		540.00		
20th cross road		1	170.00	6.00		1020.00		
						3309.00	5.30	17538
Basic Rate	5.00							
Area Weightage @ 6%	0.30							
Total	5.30							

KSRRB M300-14 Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No 301 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 143/ Item No. 19 14/ PWD SR 2018-19

	Cum							
18th B cross road		1	130.00	2.00	0.25	65.00		
17th B cross road		1	125.00	2.00	0.25	62.50		
6th B Main road		1	130.00	2.00	0.25	65.00		
7thh B Main road		1	135.00	2.00	0.25	67.50		
20th cross road		1	170.00	2.00	0.20	68.00		
						328.0	138.86	45546.08
Basic Rate	41.00							
Loading & unLoading	57.00							
Add for lead earth (1.28 tonne/cum) for 15km	38.40							
Area Weightage @ 6%	2.46							
Total	138.86							

KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications MORTH Specification No. 406 Page No. 155/ Item No. 20 18/ PWD SR 2018-19

	Cum							
18th B cross road		1	130.00	2.00	0.20	52.00		
17th B cross road		1	125.00	2.00	0.20	50.00		
6th B Main road		1	130.00	2.00	0.20	52.00		
7thh B Main road		1	135.00	2.00	0.20	54.00		
20th cross road		1	170.00	2.00	0.20	68.00		
						276.0	2001.28	552353.28
Basic Rate	1888.00							
Area Weightage @ 6%	113.28							
Total	2001.28							

KSRRB M500-6. Providing and applying primer coat with S S bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 161/ Item No. 21.6/ PWD SR 2018-19

	Sqm							
18th B cross road		1	130.00	2.00		260.00		
17th B cross road		1	125.00	2.00		250.00		
6th B Main road		1	130.00	2.00		260.00		
7thh B Main road		1	135.00	2.00		270.00		
20th cross road		1	170.00	2.00		340.00		
Basic Rate	34.00					1380.0	36.04	49735.20
Area Weightage @ 6%	2.04							
Total	36.04							

KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F E loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by smooth wheeled, vibratory & tandem rollers to achieve the desired density, but excluding cost of primer / tack coat & including lead, lift and cost of all materials, labour, HOM complete as per specifications. Clause 504 of MORTH V revision Item No. page no 159. 21.11/ PWD SR 2018-19

	Cum							
18th B cross road		1	130.00	2.00	0.05	13.00		
17th B cross road		1	125.00	2.00	0.05	12.50		
6th B Main road		1	130.00	2.00	0.05	13.00		
7thh B Main road		1	135.00	2.00	0.05	13.50		

th cross road		1	170 00	2 00	0 05	17 00		
						69.0	6239.16	430502.04
Basic Rate	5886.00							
Area Weightage @ 6%	353.16							
Total	6239.16							

KSRRB 500-7 Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 Page No. 158/ Item No. 21 7/ PWD SR 2018-19

	Sqm							
18th B cross road		1	130 00	4 80		624 00		
17th B cross road		1	125 00	3 80		475 00		
6th B Main road		1	130 00	5 00		650 00		
7th B Main road		1	135 00	4 00		540 00		
20th cross road		1	170 00	6 00		1020 00		
Basic Rate	14 00					3309.0	14.84	49105.56
Area Weightage @ 6%	0.84							
Total	14.84							

KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H M P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Table-500.9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 162/ Item No. 21.23.4/ PWD SR 2018-19

	Cum							
18th B cross road		1	130 00	4 80	0 04	24 96		
17th B cross road		1	125 00	3 80	0 04	19 00		
6th B Main road		1	130 00	5 00	0 04	26 00		
7th B Main road		1	135 00	4 00	0 04	21 60		
20th cross road - 7m wide Road		1	170 00	6 00	0 04	40 80		
Basic Rate	7778 00					132.4	8244.68	1091265.84
Area Weightage @ 6%	466.68							
Total	8244.68							

20 KSRRB M800-13 Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface - Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC-35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803							
	Sqm						
18th B cross road		2	130.00	0.10	132.10	26.00	
17th B cross road		2	120.00	0.10	122.10	24.00	
6th B Main road		2	130.00	0.10	132.10	26.00	
7thh B Main road		2	125.00	0.10	127.10	22.00	
20th cross road		2	170.00	0.10	172.10	34.00	
Basic Rate	429.00				685.50	454.74	311724.27
Area Weightage @ 6%	25.74					137.0	62299.38
Total	454.74						
						Sub Total	26543069.34
GST 12%						3185792.92	3185168.32
Project Management Consultancy 0.5%						132741.77	132715.35
Detailed project report 0.5%							132715.35
Miscellaneous and unforeseen Charges						730.03	6331.65
						Total	30000000.00

CERTIFICATE

- 1 The Work spot has been inspected and the work found to be necessary
- 2 The Estimate is prepared as per the PWD SR 2018-19
- 3 The Provision made in estimate are adequate and essential
- 4 This area comes under BBMP limits.

no of copies

Consultants

Ramaneesh
Asst Engineer
Ward No-03
ಸಹಾಯಕ ಅಧೀನಶಾಸಕರು
ಯಲಹಂಕಾ ಉಪನಗರ ಮಹಾನಗರ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಮಹಾನಗರ-108

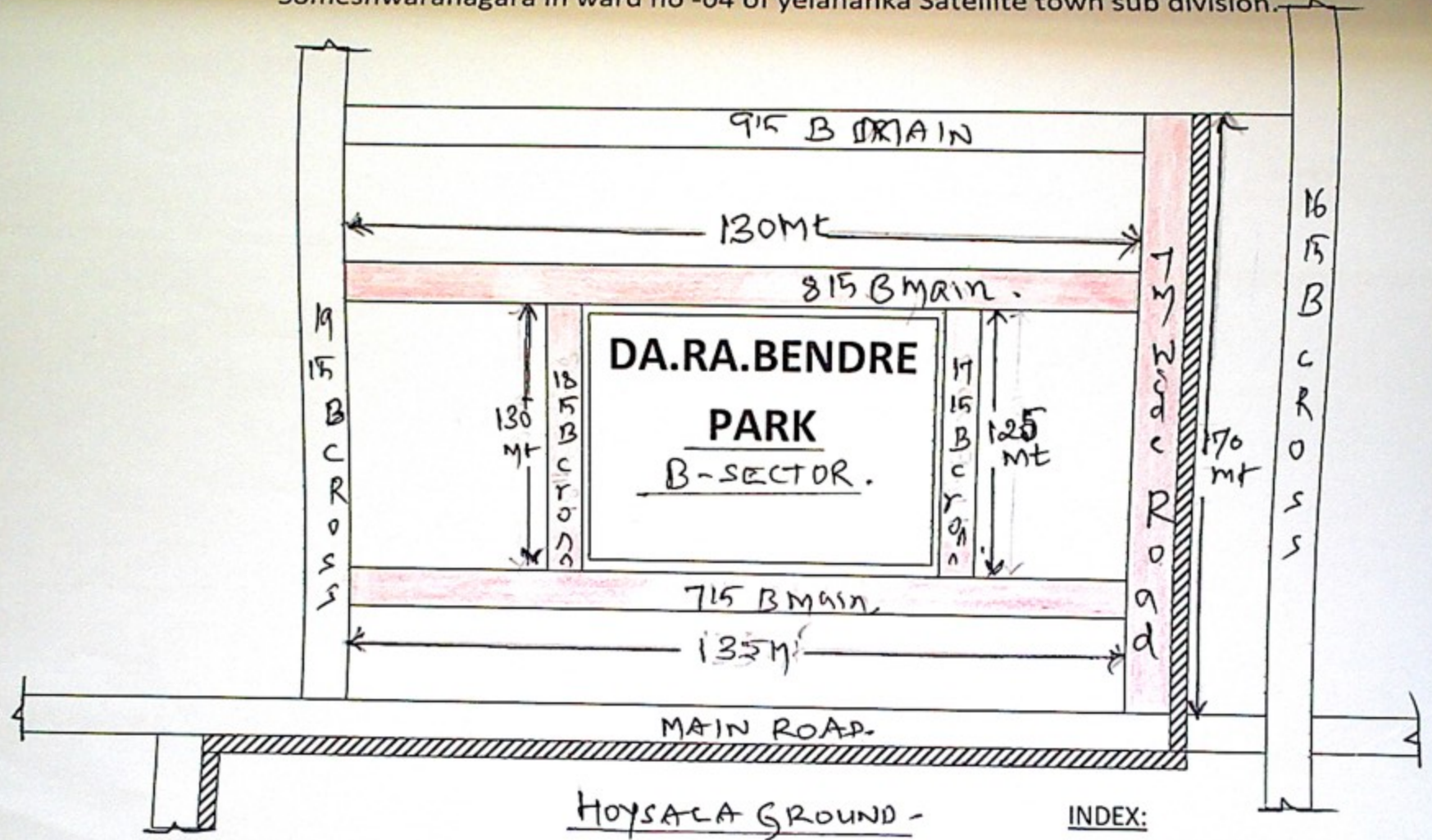
[Signature]
Executive Engineer
B.B.M.P. Division
Yelahanka

Administrative Sanction for Rs. 300.00
Three Hundred only
is accorded under head P.3521
Development work
Registered as CE No. _____ Subject _____
to conditions contained in enclosed memo
No. EE/YNK/AS/43/2020-21 Dt. 18.9.2020
[Signature]
Executive Engineer

Technical Sanction
Accorded for Rs. 200.00 Lakhs only
Head of A/C P3521
CER NO. 187 Dt. 07.01.2019

[Signature]
JA CE (YNK)

Name of work : Asphaltting and Improvements to roads and drains at A Sector, B sector, Judicial layout, Someshwaranagara in ward no -04 of yelahanka Satellite town sub division.



INDEX:

ASPHALT WORK.

A.E. Ramananjeyan
WNo-04

ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಅಭಿವೃದ್ಧಿ
ಯುಗ್ಮಾಭಿವೃದ್ಧಿ ಉಪವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-106